

Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. *Applicant/Contact name and address:* Randy H. Sian
Road 44 South
Pompeys Pillar, MT 59064
2. *Type of action:* Application for Beneficial Water Use Permit No. 43Q-30016745
3. *Water source name:* Unnamed Tributary of Yellowstone River (waste & seepage)
4. *Location affected by project:* NW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 9 and W $\frac{1}{2}$ Section 15, T3N, R31E, Yellowstone County.
5. *Narrative summary of the proposed project, purpose, action to be taken, and benefits:*
This project is to take waste water from 90 acres combined with water from a well (NA 43Q 22060-00) and pipe them via an 8 inch pipeline to an 18 Acre-Foot reservoir. From the reservoir the water will be pumped into 3 center pivot irrigation systems to irrigate 200 acres in the W $\frac{1}{2}$ of Section 15, Twp 3 North, Rge 31 East, Yellowstone County. DNRC will issue a provisional water use permit if all criteria for issuance under MCA 85-2-311 are met.
6. *Agencies consulted during preparation of the Environmental Assessment:*
(include agencies with overlapping jurisdiction)
Montana Natural Heritage Program
Montana Historic Preservation Office
Montana Department of Fish Wildlife & Parks (MFWP)
Montana Department of Environmental Quality (MDEQ)
Sweet Grass County Planning Office

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity - Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.

Determination: This Unnamed Tributary of Yellowstone River is not on the MFWP list of chronically or periodically dewatered streams. The proposed project is to use waste water from 90 acres combined with well water to sprinkler irrigate 200 acres. The proposed project should not worsen the stream condition.

Water quality - Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.

Determination: This unnamed tributary of Yellowstone River is not on the MDEQ list of water quality impaired or threatened streams. This proposed use for sprinkler irrigation should have no significant impact on water quality issues in the area.

Groundwater - Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.

Determination: There will be no increase in the pumping of groundwater; this proposed use of water should have no significant impact on groundwater quality or quantity in the area.

DIVERSION WORKS - Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.

Determination: The applicant will construct an 8" pipeline from the proposed point of diversion to an 18 acre-foot diversion reservoir. From the diversion reservoir the water would be pumped to 3 center pivot irrigation systems. The applicant is proposing to use the waste water from 92 acres along with well water to sprinkler irrigate 200 acres. This proposed diversion, its construction and operation should not have significant impacts on the channel, historic flows, barriers, riparian areas, dams or well construction.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species - Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."

Determination: The Montana Natural Heritage Program has identified six endangered species or species of special concern within this proposed project area. The species identified are the Bald Eagle, Greater Sage-grouse, Black-tailed Prairie Dog, a Bird Rookery, Snapping Turtle, and Spiny Softshell. The applicant would be expected to ensure that these species are not harmed as a result of the construction and use of this irrigation system.

Wetlands - Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.

Determination: The area does not appear to be a wetland area, so there should be no significant impacts.

Ponds - For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.

Determination: This wastewater will be diverted through an existing reservoir; it should enhance the wildlife and waterfowl resources in the area. There should be no significant impacts on fisheries from this proposed use.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.

Determination: This proposed use should not degrade soil quality or cause saline seep problems in the area. The acres are already under irrigation; this system should be more efficient. It is not expected that saline seep will occur.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.

Determination: There will be minimal soil disturbance during construction of this proposed project and there will be a small possibility of some noxious weeds spread and establishment. It is expected that the landowner will control the spread of noxious weeds on his property.

AIR QUALITY - Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.

Determination: There should be no deterioration of air quality or adverse effects on vegetation due to increased air pollutants from this proposed project.

HISTORICAL AND ARCHEOLOGICAL SITES - Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project.

Determination: The Montana Historic Preservation Office has identified no archeological or historic sites of record in the proposed project area. A cultural resource inventory is unwarranted at this time. Should cultural materials be inadvertently discovered during this project the Montana Historical Society would like to be contacted and the site investigated.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - *Assess any other impacts on environmental resources of land, water and energy not already addressed.*

Determination: There should be no significant impacts on other environmental resources of land, energy, and water from this proposed use.

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

Determination: This proposed use is not inconsistent with any locally adopted environmental plans and goals for Yellowstone County.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

Determination: There should be no significant adverse impacts on recreational or wilderness activities from this proposed use.

HUMAN HEALTH - *Assess whether the proposed project impacts on human health.*

Determination: There should be no significant impact on human health from this proposed use.

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*

Yes ___ No X If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination: No significant impact.

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

- (a) Cultural uniqueness and diversity? No significant impact
- (b) Local and state tax base and tax revenues? No significant impact
- (b) Existing land uses? No significant impact
- (d) Quantity and distribution of employment? No significant impact

- (e) Distribution and density of population and housing? No significant impact
- (f) Demands for government services? No significant impact
- (g) Industrial and commercial activity? No significant impact
- (g) Utilities? No significant impact
- (i) Transportation? No significant impact
- (j) Safety? No significant impact
- (j) Other appropriate social and economic circumstances? No significant impact

1. *Secondary and cumulative impacts on the physical environment and human population:*

Secondary Impacts: The use of this waste water for irrigation should not impact water users downstream of the project.

Cumulative Impacts: As more development takes place in this area, there could be higher demands for water for domestic, irrigation, stock, recreation, and other uses.

3. *Describe any mitigation/stipulation measures:* The applicant is aware that he would be required to cease using water if the use of the water is adversely impacting the rights of downstream users.

4. *Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:* Mr. Sian could drill wells to supply the amount of water he wishes to have for the proposed use. This would be very costly and would not utilize the waste water running off of his fields.

The “no action” alternative would mean that Mr. Sian could not use his own waste water to irrigate his fields.

PART III. Conclusion

- 1. ***Preferred Alternative:*** The preferred alternative would be to allow the use of the waste water from the unnamed tributary of Yellowstone River with the condition that the water rights of senior water users would not be adversely impacted.
- 2. ***Comments and Responses:*** None to report
- 3. ***Finding:***
 Yes___ No_X___ Based on the significance criteria evaluated in this EA, is an EIS required?

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action: No significant environmental impacts were identified. No EIS is required.

Name of person(s) responsible for preparation of EA:

Name: Christine Smith

Title: Water Resources Specialist

Date: July 12, 2006